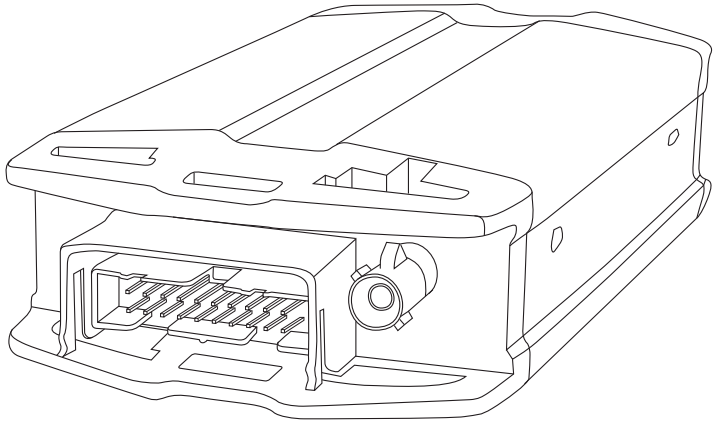
Networkfleet 3500 Product Line
Installation Guide



Light/Medium Duty (L3500) | Heavy Duty (H3500) | Universal (U3500)

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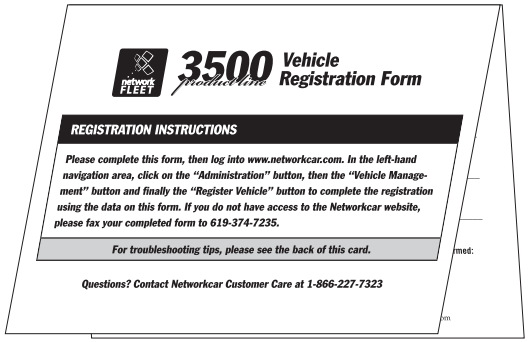
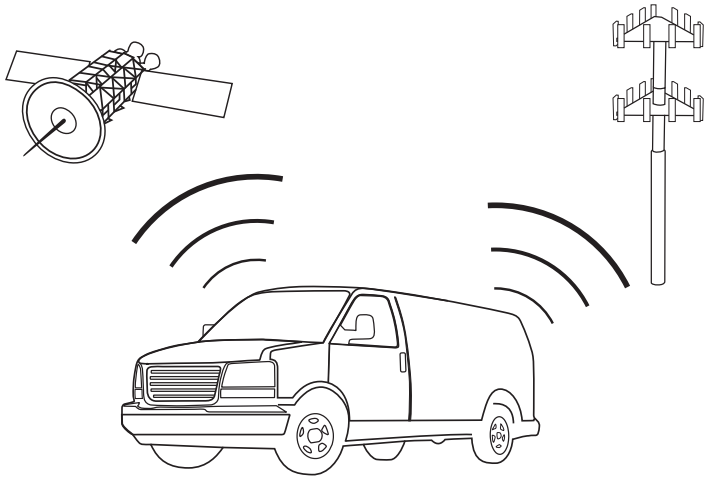
Fill out the enclosed registration form before completing installation.

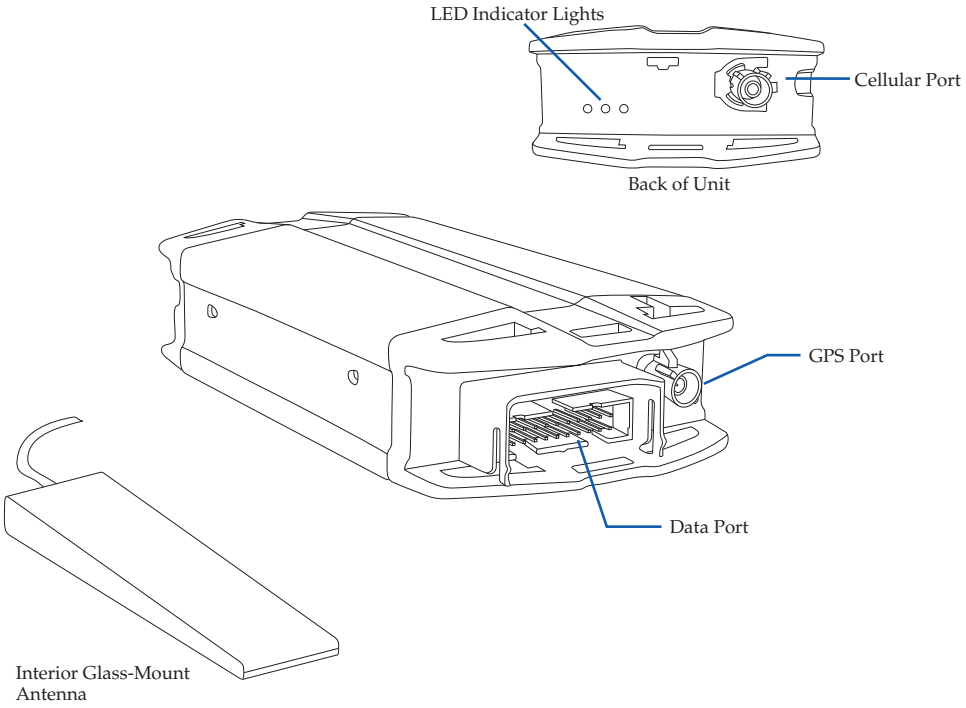
Record the following information:

- Vehicle Identification Number (VIN)
- License Plate
- Year
- Model
- Make
- Unit's Serial number (10 digits)

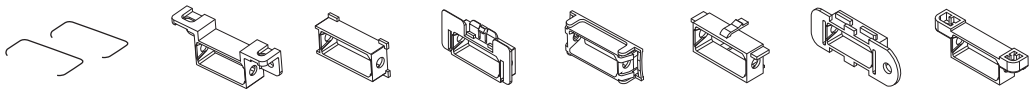

3500 Vehicle Registration Form
REGISTRATION INSTRUCTIONS
Please complete this form, then log into www.networkcar.com. In the left-hand navigation area, click on the "Administration" button, then the "Vehicle Management" button and finally the "Register Vehicle" button to complete the registration using the data on this form. If you do not have access to the Networkcar website, please fax your completed form to 619-374-7235.
For troubleshooting tips, please see the back of this card.
Questions? Contact Networkcar Customer Care at 1-866-227-7323



Installation Tip: Metal walls and tall buildings may interfere with the reception from GPS satellites and the cellular network. Perform installation when the vehicle is in clear view of the sky. Conduct final installation verification after the vehicle has been running outside for 5-10 minutes.



Zip Ties (X7)



Retainer Bar (X1)

Harness Adapters (X7)

Core Connector (X1)

Bypass Connector (X1)

Harness Flat Cable (X1)

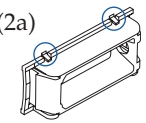
1. Select an Adapter

Select an adapter that most resembles the shape of the OBD-II port of the vehicle. Use these guidelines to match an adapter (each adapter is stamped with a number) to a vehicle it is most likely to fit.

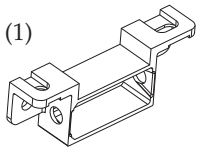
Ford, GM **(1) or (6)**
Honda, Lexus, Toyota, Chrysler **(2)**
Toyota*, Chrysler* **(2a)**
Saturn **(3)**
Mercedes, BMW **(4)**
Porsche, Audi, Volkswagen **(5)**
Volvo **(6)**
Saab **(7)**

* For certain Toyota and Chrysler vehicles, you may need to adjust the #2 adapter by removing the clips on the top and bottom of the adapter. Below is an example of the adjusted adapter labeled **(2a)**.

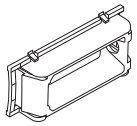
(2a)



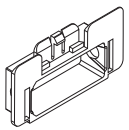
(1)



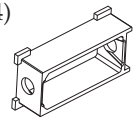
(2)



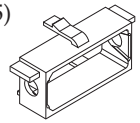
(3)



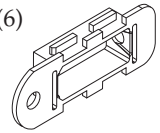
(4)



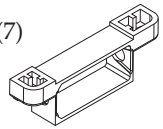
(5)



(6)



(7)

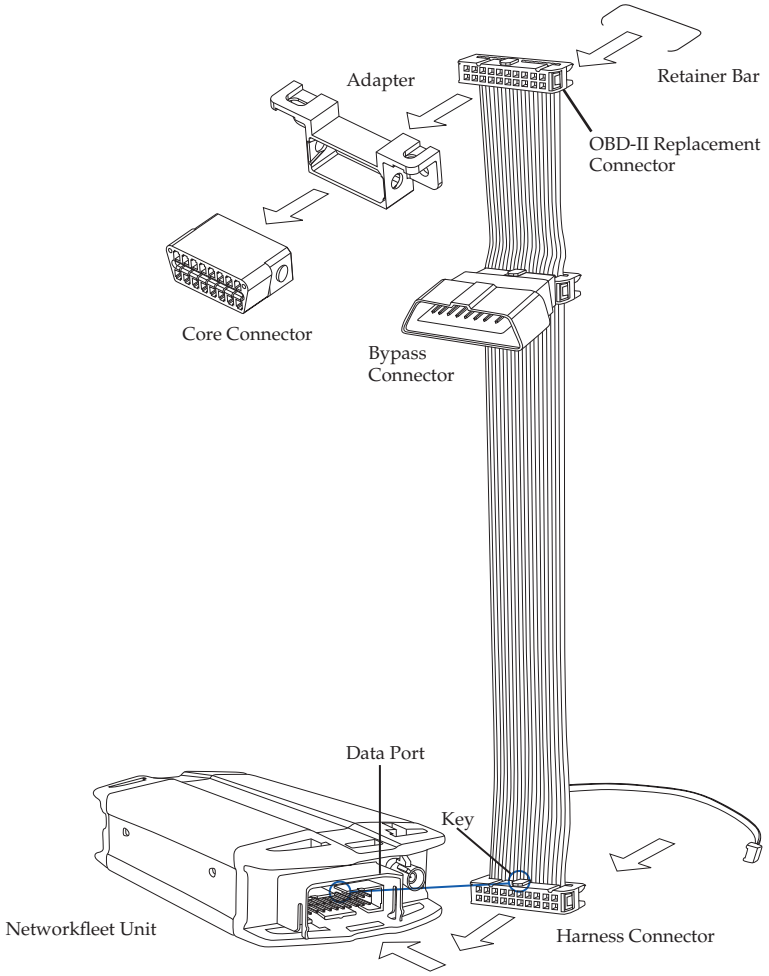


1. Core Connector Assembly

1. Snap the selected plastic adapter to the back of the Core Connector.
2. Attach the Core Connector to the OBD-II Replacement Connector.
3. Use a Retainer Bar to secure the Core Connector.

2. Data Port Connection

1. Connect the Harness Connector to the Data Port Interface.
2. Use a Networkcar branded yellow zip tie to secure the connection.

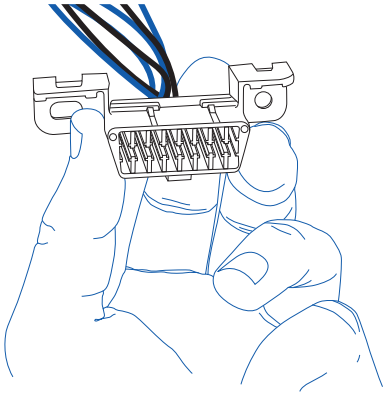


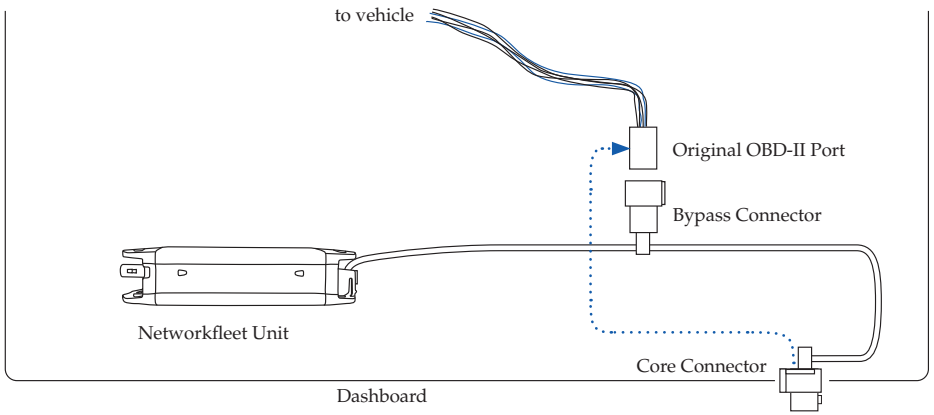
Installation Tip: Please note that the key on the Harness Connector of the Harness Flat Cable must be facing toward the bottom of the Networkfleet device to properly connect.

1. With the vehicle's engine OFF, remove the OBD-II port.
   - The OBD-II Connector may be hidden behind a hush panel.
   - To remove the connector, you may need to remove screws or depress the clips.

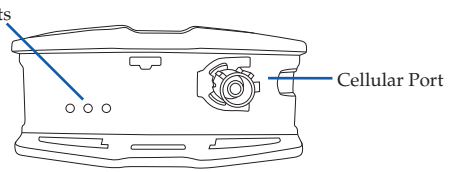
2. Connect the Bypass Connector to the vehicle OBD-II port that was previously removed.

3. Attach the Core Connector to the position where the original OBD-II connector was installed. Secure it with the screws or clips removed from the OBD-II Connector's original position (if applicable).

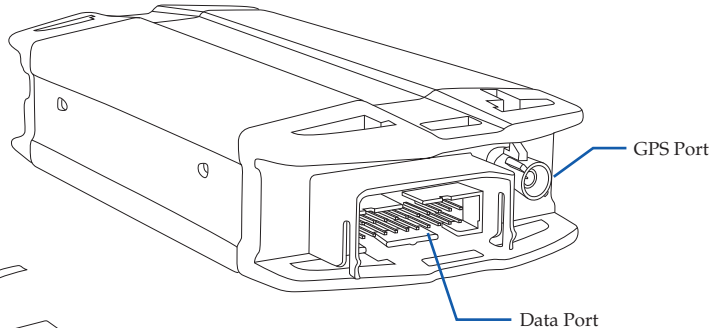




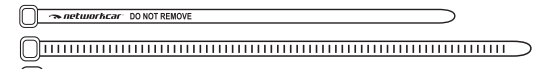
To complete installation proceed to page 13



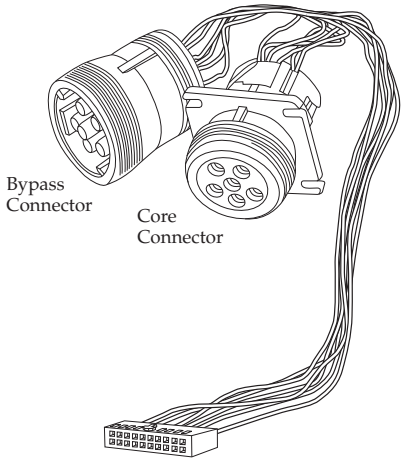
Back of Unit



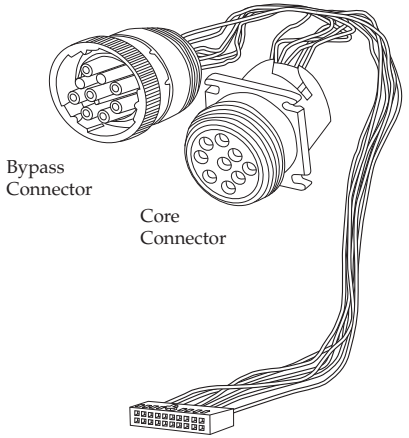
Interior Glass-Mount Antenna



Zip Ties (X7)



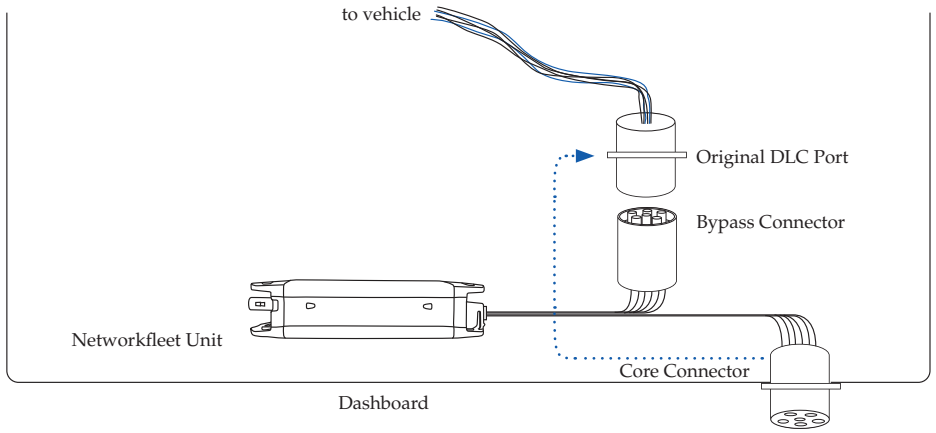
6-Pin Harness (X1)



9-Pin Harness (X1)

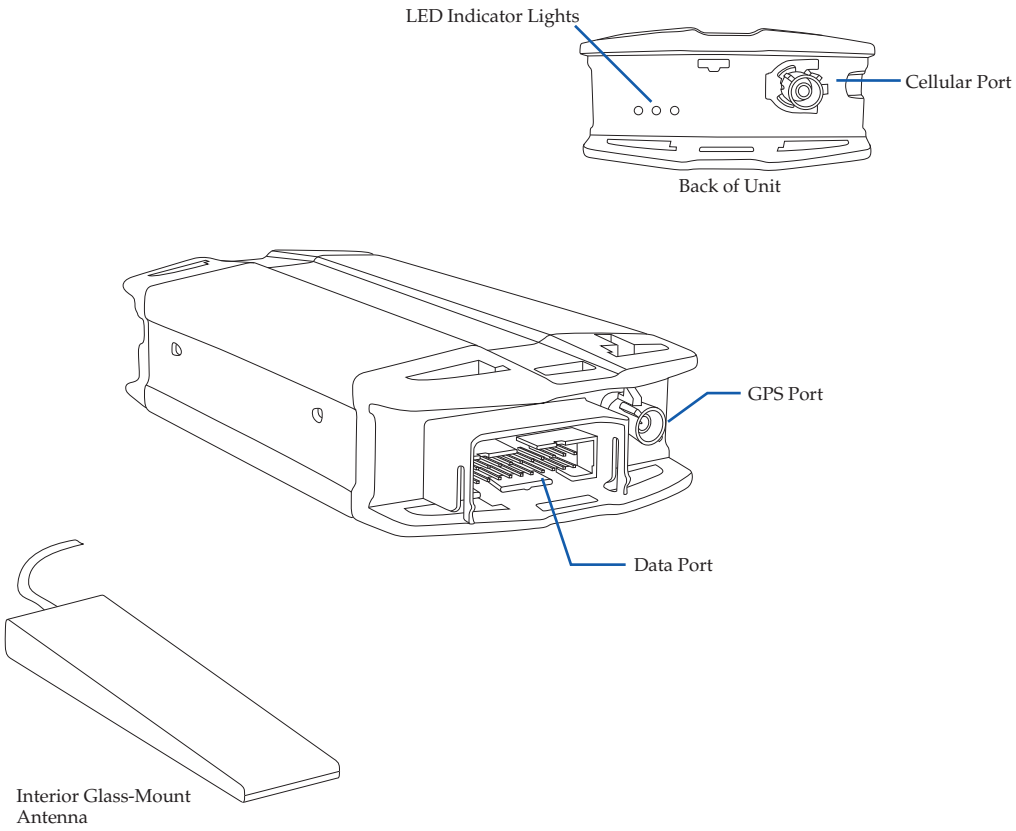
1. With the vehicle's engine OFF, unscrew the DLC port from its position under the dashboard*. In most cases, the DLC port is located under the dashboard on the left side of the steering wheel, facing toward the floorboard.
2. Plug the Bypass Connector of the harness into the DLC port that was previously removed from the vehicle in step 1. For the 9-pin connector, turn the rotating cap clockwise to lock into place.
3. Mount the Core Connector of the harness into the place in which the DLC port originally resided.

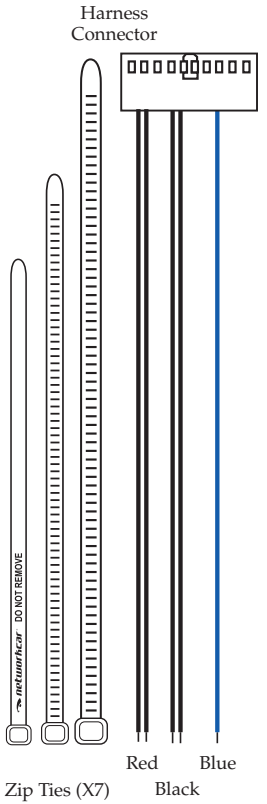
*Note: DLC Port Connector may also be located near or behind the driver seat.



To complete installation proceed to page 13

The Universal unit can be installed in light, medium and heavy vehicles. It is a GPS data only device and does not read diagnostic data from the vehicle's engine computer.





Black Wire - Ground

- With the vehicle's engine OFF, attach the Black Wire directly to a chassis ground point or to a ground line (chassis ground) by splicing directly to a ground lead or by using a wire tap (recommended).

Red Wire - Continuous Power

- With the vehicle's engine OFF, use the voltmeter to locate a 12-volt BATTERY lead and attach the Red Wire by splicing directly to the lead or by using a wire tap (recommended). If attaching to a fused lead or using an inline fuse (not necessary), verify that it is at least 5 amps.
- Be careful not to confuse a "Retained Accessory Power (RAP)" line with a true Continuous Power line (12 volt, always ON line).
- To determine a true Continuous Power source:

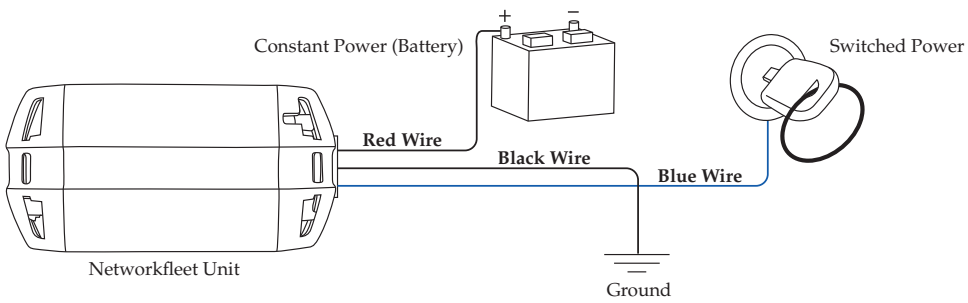
  1) Ensure the Driver Door is OPEN
  2) Select a wire
  3) With vehicle's engine OFF, use a voltmeter to measure the DC voltage on the wire. It should show 12 VDC or higher.

Note: Please ensure that the Driver Door is OPEN during the ENTIRE installation process.

Blue Wire - Switched Power

- With the vehicle's engine OFF, use the voltmeter to locate an IGNITION line with switched power and attach the Blue Wire to the line by splicing directly to the lead or by using a wire tap (recommended).
- Do NOT use an inline fuse on this line.
- Do NOT use accessory Power.
- To determine a switched power source:

  1) Ensure the Driver Door is OPEN
  2) Select a wire
  3) With vehicle's engine OFF use voltmeter to measure the DC voltage on the wire. It should show 0 VDC.
  4) Start the engine and confirm that the voltage of the same wire is 13.1 VDC or higher
  5) Turn the vehicle's engine OFF and confirm that the voltage of the same wire is 0 VDC



To complete installation proceed to next page

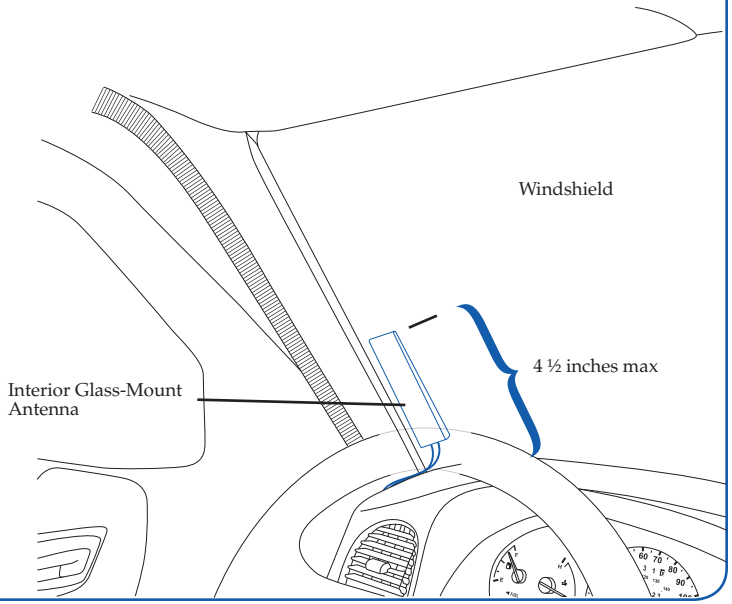
1. Use enclosed alcohol preparation pad to clean the inside windshield where the antenna is to be placed. For proper operation, the antenna should be placed on flat, clear glass on the driver's side interior lower corner of the windshield.

   Ensure that the antenna does not extend more than 4 ½ inches from the bottom of the interior windshield and is located outside the area swept by the windshield wipers.

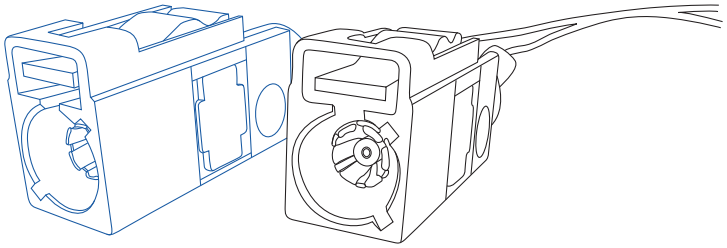
   Do NOT place the antenna in the following areas:

   - Behind stickers or decals already on the glass
   - On the shade band of the glass
   - On a curved area of the glass
   - On a moist or damp area of the glass
   - On an area that will obstruct the driver's view

2. Run the cables up the door seam or up through the dashboard.
3. Remove the protective-strip from the antenna to expose the adhesive.
4. Carefully affix the antenna to the glass that was prepped in Step 1. Press the antenna firmly to the glass while being careful not to damage the antenna.

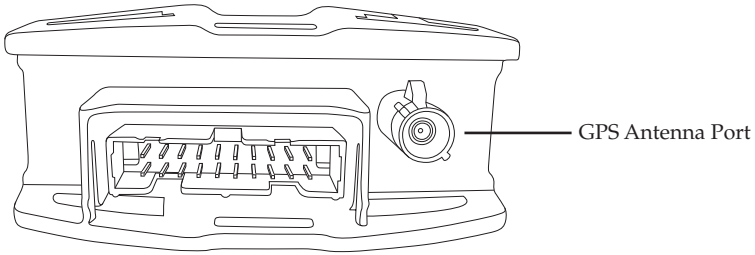


Installation Tip: Please note that the ideal temperature range to perform the installation is between 70°F to 100°F (21°C to 38°C) with a minimum suggested application temperature of 60°F (15°C).



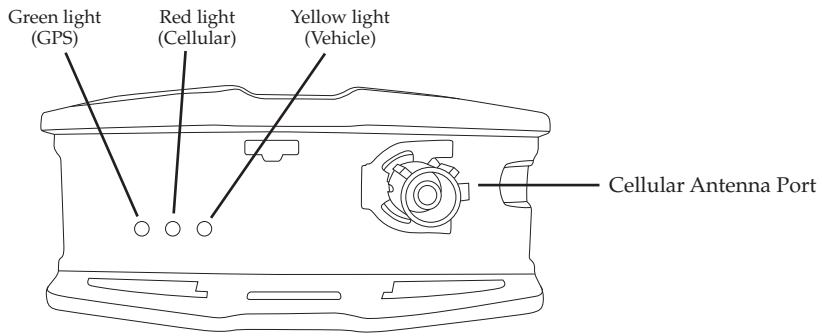
GPS Antenna Wire (blue) Cellular Antenna Wire (maroon)

- If the antenna becomes disconnected from the unit during installation, make sure to reconnect the antenna wires to the device. Each antenna wire should be plugged into the appropriate jack labeled on the end of the unit.
- Although the antennas may appear similar, please note that the cellular antenna is encased in a maroon end cap and the GPS antenna is encased in blue.
- Each antenna wire should easily snap into the appropriate jack. No solder or excessive force is necessary. Note that the cellular antenna connector should be snapped in at



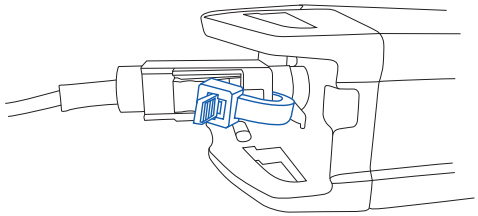
Front of Unit

1. Start the vehicle's engine. All lights (Red, Yellow, and Green) on the device should begin blinking rapidly (twice a second).
2. The device is operating normally when the rapid blinking ceases and the Green and Yellow lights begin to blink in a slow pattern (ON for 5 seconds and OFF for 1 second). The Red light pattern will continue to vary and should not be used to verify installation.
3. The device should take no longer than 10–15 minutes after the engine is started to reach normal operating mode which will indicate a successful installation.



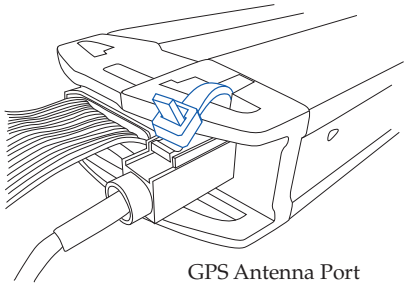
Back of Unit

1. For the Cellular Antenna, slide the end of the Networkcar branded yellow zip tie into the cut-away section on the back left side of the device. If the antenna is plugged in correctly (at a 90° angle) the zip tie should slide through the top of the cellular antenna plastic cap. Lock the zip tie and cut the excess plastic to prevent the antenna cable from being unplugged.



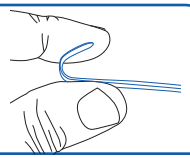
Cellular Antenna Port

2. For the GPS antenna, slide the end of the Networkcar branded yellow zip tie into the cut-away section of the top right side of the device. If the antenna is plugged in correctly, the zip tie should slide through the top of the GPS antenna plastic cap. The zip tie should now be looped through the plastic end cap of the device, as well as the plastic cap of the antenna cable. Lock the zip tie and cut the excess plastic to prevent the antenna cable from being unplugged.

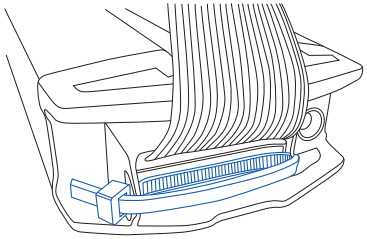


GPS Antenna Port

Note: For easier threading of the zip tie through the plastic cap of each antenna, bend the end to curve it upward.

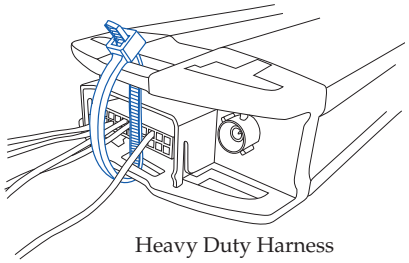


3a. Once the Light/Medium Duty vehicle harness is plugged in, slide a Networkcar branded yellow zip tie through the slots provided in front of the harness connector, moving from the left to right side of the device (Threading the tie in the opposite direction may cause interference with the GPS antenna connector). Once the zip tie is in place across the back of the harness connector, tighten and remove the excess plastic. If possible, position the zip tie so that the "DO NOT REMOVE" message is showing.



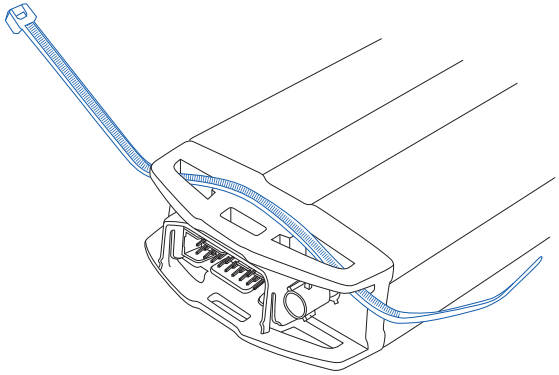
Light/Medium Duty Harness

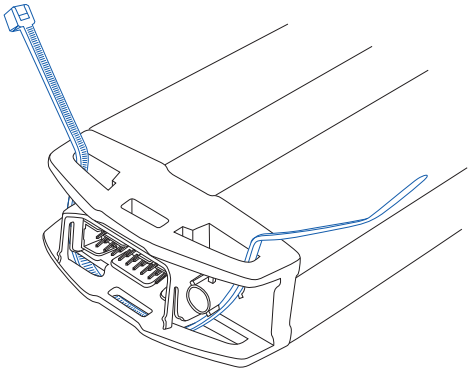
3b. Once the Heavy Duty or Universal vehicle harness is plugged in, slide a Networkcar branded yellow zip tie through the slots provided in the center of the top and bottom sides of the device end cap. Thread the zip tie in between the black and blue wires on the harness. Once the zip tie is in place across the back of the harness connector, tighten and remove the excess plastic. If possible, position the zip tie so that the "DO NOT REMOVE" message is showing.

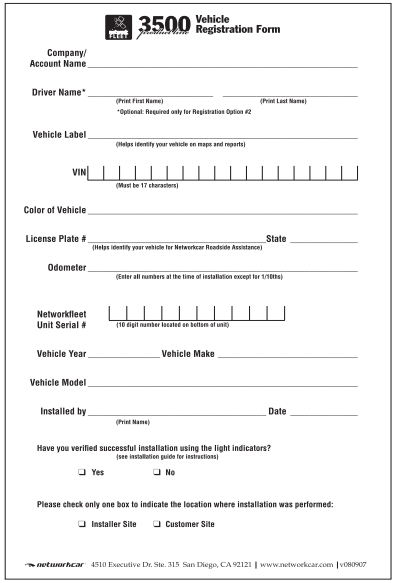


Heavy Duty Harness

1. Before securing the device under the dashboard, make sure that you have recorded the VIN, hardware serial number, and odometer reading on the registration form. Also verify that you have checked the light indicators. After installation, provide the registration form to the fleet manager for delivery to Networkcar.







3500 Vehicle Registration Form

Company/ Account Name _____

Driver Name* _____ (Print First Name) _____ (Print Last Name)

*Optional: Required only for Registration Option #2

Vehicle Label _____

(Helps identify your vehicle on maps and reports)

VIN _____

(Must be 17 characters)

Color of Vehicle _____

License Plate # _____ State _____

(Helps identify your vehicle for Networkcar Roadside Assistance)

Odometer _____

(Enter all numbers at the time of installation except for 1/10ths)

Networkfleet Unit Serial # _____

(10 digit number located on bottom of unit)

Vehicle Year _____ Vehicle Make _____

Vehicle Model _____

Installed by _____ Date _____

(Print Name)

Have you verified successful installation using the light indicators?

(see installation guide for instructions)

❑ Yes ❑ No

Please check only one box to indicate the location where installation was performed:

❑ Installer Site ❑ Customer Site

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2. Use zip ties to fasten the hardware securely to a stable bracket or wire bundle under the dash.

3. Loosely bundle the antenna's excess cable and secure it away from moving parts. Bundling it tightly will have a negative effect on its performance.

Issue: **Red light continues to blink rapidly**

Solution:
- Verify antenna connection to device and assess antenna for damage.
- Verify antenna is installed correctly on the interior glass.
- Contact Customer Care to confirm network coverage availability.

Issue: **Yellow light continues to blink rapidly**

Solution:
- Contact Customer Care to verify engine computer compatibility.
- If incompatible, install a Universal device (U3500).

Issue: **Green light continues to blink rapidly**

Solution:
- With the vehicle's engine OFF, unplug the device for 3 minutes and check each item below before reconnecting.
  - Disconnect the GPS Antenna wire and check the antenna wire and connector for damage.
  - Reconnect the GPS antenna wire connector to the GPS port.
  - Reconnect device, start engine and keep the vehicle running or drive it for 10-15 minutes.

Issue: **Yellow light stays on solid**

Solution:
- Verify cellular antenna connection to device (maroon end cap).
- Verify that the antenna was properly installed.
- Make certain that the antenna has a clear view of the sky and is not blocked by underground parking structures or trees.
- Wait 15 minutes with the vehicle's engine on.

Issue: **Green light stays on solid**

Solution:
- Verify GPS antenna connection to device (blue end cap).
- Verify that the antenna was properly installed.
- Make certain that the antenna has a clear view of the sky and is not blocked by underground parking structures or trees.

General

Q: What is the power draw for the device?

A: Normal Operating Mode 200 mA @ 12 V

Sleep Mode 21 mA @ 12V

Q: Are the harnesses interchangeable between 3100, 3400 and 3500 product lines?

A: Yes as long as it is the same type of unit. For example, a H3100 harness can be used on a H3500 unit.

Q: Are the devices interchangeable? Can I use a L3500 device with a H3500 harness and install it on a heavy duty vehicle?

A: No, each device has special software that makes it only compatible with a certain class of vehicles.

- L3500 (1996 and newer vehicles Class 1-6 Light Duty)
- H3500 (1996 and newer vehicles Class 7-8 Heavy Duty)
- U3500 (Any vehicle - Universal)

Q: When installing the U3500 device, are fuses involved or can the device be “wired hot”?

A: We recommend splicing the U3500 harness to fused leads, though the device can be “wired hot” since there is an internal re-settable fuse. An inline fuse is not necessary, however if one is used, it should be at least 5 amps.

Antenna

Q: Are the antennas interchangeable between the 3100, 3400 and 3500 product lines?

A: No.

Q: Can the glass mount antenna be installed in the A-Pillar?

A: No, the glass mount antenna is designed so that it will only function properly with a clear view of the sky which is best achieved by placing it on the glass windshield.

Q: I need to do a unit transfer. Can I re-use the antenna? How do I remove it from the glass?

A: No, you cannot re-use the antenna on another vehicle. The adhesive on the antenna is one-time use only and will not function properly after it is removed.

* Re-installation kits are available - contact Customer Care at (866) 227-7323 for more information.

Instructions for Antenna Removal

Because of the strength of the antenna adhesive, use a razor or Goo Gone (a household solvent) for removal.

1. To remove the antenna with a razor, peel a small section of the antenna off of the glass and slide the razor between the glass and the antenna.
2. Using a sawing motion, carefully remove the antenna from the glass and discard.

If you have any additional questions, you may contact
Networkcar Customer Care:

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